#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009381 Address: 333 Burma Road **Date Inspected:** 05-Oct-2009

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

OBG & TOWER Components **Bridge No:** 34-0006 **Component:** 

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

#### BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 029 located on Floor Beam FB3042 – 001. Welder is identified as 206358. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint # 027 located on Floor Beam FB3046 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2133.

FCAW process welding of weld joint # 036 located on Floor Beam FB3042 – 001. Welder is identified as 206358. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW process welding of weld joint #022 located on Floor Beam FB3027 – 001. Welder is identified as 045209. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint #070 located on Floor Beam FB3046 – 001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - Tc - U4b - F.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 014 located on Traveler Rail 11TR2 – 015. Welder is identified as 205390. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2232 - Tc - U5 - F.

SAW process welding of weld joint # 003 located on Cross Beam CB202C – 016. Welder is identified as 215248. ZPMC QC is identified as Zheng Zhi Wei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2221 - B - L2c - S - 2.

FCAW process welding of weld joint # 010 located on Traveler Rail 11TR2 – 015. Welder is identified as 068858. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

BAY 6

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as TOWER Components. The weld designations reviewed are as follows:

- 1.  $NSD1 DPSA4 2B/B 20 \sim 25$
- 2.  $NSD1 DPSA4 2B/B 4 \sim 7$ ; 12; 13; 16; 17
- 3. NSD1 DPSA4 2B/B 3

Tower

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #2A located on Tower Strut WD1 – A305 – 65M – 3. Welder is identified as 067707. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G(2F) - FCM - Repair - 1.

## WELDING INSPECTION REPORT

(Continued Page 3 of 3)

SMAW process welding of weld joint #7B located on Tower Strut WD1 – A305 – 53M – 3. Welder is identified as 067707. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS -485 - SMAW - 2G (2F) - FCM - Repair - 1.

Cross Beam - 8

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #054 located on Floor Beam FB204 – 018. Welder is identified as 053742. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -T-2231-B-U2-F.

SMAW process welding of weld joint #70 located on Cross Beam CB202G – 020. Welder is identified as 070007. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -P-2112.

SMAW process welding of weld joint #019 located on Floor Beam FB202 – 008. Welder is identified as 053609. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B -T - 2231 - B - Tc - U4b - F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

No Relevant Conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer